What is claimed is:

1. A method for using an isotropic wet etching process chemical process for trimming semiconductor feature sizes with improved critical dimension control comprising the steps of:

providing a hard mask overlying a substrate included in a semiconductor wafer said hard mask patterned for masking a portion of the substrate for forming a semiconductor feature according to an anisotropic plasma etching process;

isotropically wet etching the hard mask to reduce a dimension of the hard mask prior to carrying out the anisotropic plasma etching process; and

anisotropically plasma etching a portion of the substrate not covered by the hard mask to form the semiconductor feature.

2. The method of claim 1, wherein the dimension includes a width.

3. The method of claim 2, wherein the width includes a gate structure width reduced to about 10 to about 50 nanometers.

4. The method of claim 1, wherein the hard mask includes at least one metal nitride layer.

5. The method of claim 4, wherein the at least one metal nitride layer includes at least one of silicon nitride, silicon oxynitride, and titanium nitride.

6. The method of claim 1, wherein the substrate includes a polysilicon layer overlying a silicon substrate.

7. The method of claim 1, wherein the step of isotropically wet etching includes at least one of spray etching and immersion etching.

8. The method of claim 7, wherein the step of spray etching includes the step of simultaneously spinning the semiconductor wafer while spraying the etching solution onto the hard mask.

9. The method of claim 8, wherein the step of simultaneously spinning includes a spin rate of about 300 to about 2000 revolutions per minute.

10. The method of claim 1, wherein the step of isotropically wet etching includes the use of a wet etching solution comprising hydrofluoric acid and glycol.

11. The method of claim 10, wherein the wet etching solution has a temperature of about 20°C to about 90°C.

12. The method of claim 11, wherein the etching solution includes a mixture of hydrofluoric acid (HF) and glycol within a range of concentration of from about a ratio of 1 part HF to 10 parts glycol to about a ratio of 1 part HF to 100 parts glycol.

13. The method of claim 1, wherein the step of isotropically wet etching includes the use of a wet etching solution comprising a mixture of water (H_2O) and hydrofluoric acid (HF) within a range of concentration of about a ratio of 20 parts H_2O to 1 part HF to about a ratio of 400 parts H_2O to 1 part HF.

14. The method of claim 1, wherein the step of isotropically wet etching includes the use of a wet etching solution comprising a mixture of a phosphoric acid solution comprising at least 80% by weight of phosphoric acid at a temperature of about 150°C to about 180°C.

15. A method for forming a semiconductor feature on a semiconductor wafer comprising the steps of:

providing a semiconductor wafer including multiple layers comprising at least one metal nitride layer overlying a polysilicon containing layer;

photolithographically patterning the metal nitride layer to form a patterned etching surface;

anisotropically plasma etching through a thickness of the patterned etching surface to reveal a first exposed portion of the polysilicon containing layer according to a plasma etching process;

etching according to a wet etching process to reduce a width portion of the at least one metal nitride layer to reveal a second exposed portion of the polysilicon containing layer; and

anisotropically plasma etching through the second exposed portion of the polysilicon layer to form a semiconductor feature.

16. The method of claim 15, wherein the step of etching according to a wet etching process includes using an etching solution with a temperature of about 20°C to about 90°C.

17. The method of claim 15, wherein the step of etching according to a wet etching process includes the steps of simultaneously spinning the semiconductor wafer while spraying an etching solution onto the patterned etching surface.

18. The method of claim 15, wherein the step of etching according to a wet etching process includes the use of a wet etching solution comprising hydrofluoric acid and glycol.

19. The method of claim 18, wherein the etching solution includes a mixture of hydrofluoric acid (HF) and glycol within a range of concentration of from about a ratio of 1 part HF to 10 parts glycol to about a ratio of 1 part HF to 100 parts glycol.

20. The method of claim 15, wherein the width portion outlines a gate structure and is reduced to about 10 nanometers to about 50 nanometers.